

For the Land of Ten Thousand Lakes, the loon, a water bird, is a fitting symbol. The loon became the official state bird of Minnesota by act of the Minnesota legislature of 1961. At many previous sessions of the legislature various birds had been proposed for the official symbol. For years, the little goldfinch was considered the unofficial state bird of Minnesota. Both the pileated woodpecker and the kingfisher were proposed for the honor at various times. But none received the acclaim that the loon was given by the lawmakers in 1961.

By ELIZABETH M. BACHMANN

The bill proposing the loon as Minnesota's official state bird was House File 79, introduced on January 17, 1961, and sponsored by representatives Loren S. Rutter of Kinney, William H. House of Two Harbors, Francis La Brosse of Duluth, Emil Schaffer of Austin, and Fred W. Schwanke of Deerwood. It was passed by the house of representatives on February 16, with 88 votes cast for the bill and 25 against it.

The companion bill in the state senate was Senate File 843, introduced on February 28, and sponsored by senators Norman J. Walz of Detroit Lakes and Clifford Lofvegren of Alexandria. The senate concurred in, and passed, the house bill on March 7, with 56 votes cast for it and seven against. On March 13, 1961, Governor Elmer L. Andersen signed the Elizabeth M. Bachmann, on the staff of the Minnesota Department of Conservation, has written many articles for local and national magazines on wildlife and conservation.

bill, making it a law. It became Chapter 76 of the Laws of 1961.

The word *loon* is of uncertain origin. Some ornithologists have tried to connect it with the word *lummox* meaning a clumsy fellow, for on land the loon is certainly very awkward. One thing is sure, his name has no connection with the word *lunatic*. People who have heard the bird's call referred to as "crazy laughter," think that the name *loon* is related to that fact. Nothing could be farther from the truth.

The loon is a large, spectacular black and white bird, with a long black bill. An average adult might have a body length of about three feet and a wing span of five feet. Its characteristic color is clear black, with snowy white squares, stripes, and spots. This plumage is not acquired until the bird is about three and a half years old. The loon's bill has sharp cutting edges and tapers to a slim, sharp point. His tail is short and rigid. His narrow wings are stiff and powerful. The short, strong legs are attached at the rear of the body, the position most useful for speed in swimming. The loon is streamlined in shape, which helps to make him an expert swimmer and diver. In swimming he makes good use of his

Above: When the loon sits on the ground, as we see in this picture, his body is almost straight up and down. This is because his short legs are attached at the rear of the body. This sketch was made by Dr. W. J. Breckenridge, Director, Museum of Natural History, University of Minnesota, Minneapolis.

big webbed feet to propel himself through the water. As the foot is swept back, the toes spread wide to form an effective paddle. On the return stroke of each foot, the toes fold up tightly to reduce drag friction through the water.

In, on, and under, the water the loon is a graceful bird, for he is thoroughly at home in that element. But not so on land. Being a water bird, he has no need to be equipped for travel on land. When he sits on the ground his body is nearly vertical. If he becomes frightened and wants to hurry away, he leans far forward on his breast and hobbles over the ground. He uses the tips of his wings as crutches to aid his lumbering progress.

Loon chicks can walk more easily than their parents. Using both feet together, they progress by jumping, somewhat like a frog. As the young birds develop and grow heavier, they become less agile when out of the water.

The summer plumage of the adult loon is very striking in appearance. The head covering is like a black hood, with crown feathers which can be raised and lowered. There is a matching strip of black around the throat. Across the back of the bird's neck is a black and white striped band. Under his chin is a smaller striped spot. The loon's summer garb, by which he is best recognized, looks somewhat like a full-dress coat. The back is decorated with black and white squares; the tails are edged with a broad band of black, dotted with white: the lapels are of black and white stripes. With it, the loon wears a vest of purest white. The only variation in the black and white color scheme is provided by the eyes, which are dark red.

In winter the loon's plumage is mostly dark gray, and the distinctive black and white checkerboard pattern on his back is gone. The male and female loons are always colored alike. And since they are nearly the same size, it is almost impossible to tell them apart.

Loons are migratory fowl. During the spring migration they drift northward singly or in small groups as the ice disappears from the lakes. Larger numbers may gather in feeding areas located along the way. Loons are often observed stopping at Lake Como in St. Paul, Lake Nokomis in Minneapolis, and other Twin Cities' lakes, on their way north. The birds spend the summer months in the upper

part of the continent, from northern United States to northern Canada. Late in the fall they migrate south, a few at a time. By the time the lakes are frozen over, all have gone south to Florida and the Gulf of Mexico or southwest to the Pacific coast. Most of them spend their winters on salt water.

Pairs of loons start to nest as soon as they reach their summer grounds in the northland. The loon definitely does not like crowds during the nesting season. A single pair likes to have a good-sized lake all to itself until the eggs are hatched and the chicks have got a start in life. But they assemble in large flocks at places away from the nesting area, and that is when their most thrilling choruses may be heard.

Most loon nests are built on small islands. Rarely are they found on the shore of a lake. Sometimes they are constructed on top of an old muskrat house. But always they are in a place where the birds, both old and young, can easily slip into the water. A nest might be just a tiny island made up of floating reeds, twigs and moss, a bit of a floating bog — three sides protected by standing reeds, the other side toward open water. Most nests are placed where there is some cover of tall reeds or other vegetation to help conceal the place where the young are hatched and sheltered. Loons may return to the same nesting sites year after year.

The loon lays one or two eggs, but never more than two. The eggs are olive-green to olive-brown in color, with a few brown spots here and there. Because the loon's nest is built close to the water, the eggs are easy prey for such enemies as muskrats, otter, beaver, and mink. Crows and herring gulls may also destroy the eggs.

Sometimes loons abandon their nests before the chicks have been hatched. This may be because the birds are frightened off by human intruders nearby, because the eggs have been destroyed, or for other reasons. Oftentimes birds that have deserted their nest will find a new location and start over again to build.

The loon will breed not only on deep, clear lakes, but also on small ponds that have no fish in them. Shallow bays off big lakes seem to be especially desirable.

The parents take turns sitting on the eggs during the 29 days of incubation. While on the nest they continue to build up the sides by plucking any vegetation that is within reach and adding it to the edge. At the same time they are constantly on the alert for intruders.

When the loon chick is hatched it is covered with thick, soft down. It is sooty black on the back, a little lighter on chin and throat, and becoming white on the breast. Within a few weeks this covering is replaced by a lighter colored down, and soon afterward little feathers about a quarter of an inch in length appear. The baby loon's cry sounds very much like the peep-peep of the domestic chick. Not until the fall do the young birds develop the hooting, yodeling call of the adults.

When the baby loons are only two or three days old they begin to dive beneath the water. From that tender age on, they quickly learn to dive deeper and deeper. Sigurd T. Olson in his booklet on the common loon reports that he observed a chick only a week old which made sixty-foot dives.

But even though they can dive at an early age, the chicks stay close to their parents for the first six weeks. Little loons are often seen riding on the backs of the parent birds. At first the parent makes a sort of nest on his back by raising his wings a little. Sometimes two chicks will ride on the back of one of the older birds. It is fun to see the parent loon suddenly submerge and get out from under his little passengers, leaving the chicks floating free. The babies enjoy riding, and climb up whenever they have a chance.

Loons are very devoted parents. Try coming between them and one of their chicks in a canoe!

They will immediately start giving frantic directions to the baby. Even when only a few days old, the young bird will dive according to instructions and come up again in an entirely different place, yards away.

It is one of the favorite tricks of the loon to dive quickly when he feels himself in danger or his privacy invaded, and to come to the surface a long distance away, laughing derisively at his pursuers.

Because loons as a rule have only one or two chicks in a season, and the young birds are always in danger of being destroyed, the loon population just manages to hold its own. There will never be an overpopulation as long as their families remain so small. Loons have never been so numerous as to create a problem and for this reason they have

long been on the list of birds that must be protected.

The loon feeds on fish, of course. But besides this he eats crayfish, crabs, water insects, shellfish, and a little vegetable matter. He is not a scavenger and does not feed on dead animals. At one time people thought that, because he ate fish, the loon ought to be destroyed before he took too many. As a matter of fact, loons are not very numerous and the fish they eat would amount to but a small fraction of the fish in Minnesota's ten thousand lakes. The loon itself is edible but not very tasty. Its flesh is stringy and has an unpleasant, fishy flavor.

Minnesota's state bird is a strong, swift flier. Even though his wings are small for a bird of his size and weight, they are powerful. Because the loon has short wings and a heavy body, it requires great effort for him to rise into the air. Sometimes he churns along on the surface of the water for a considerable distance, up to a quarter of a mile, before he completes his take-off and is in flight. As he flies, the wings make a whistling sound.

Adult loons shed their feathers twice a year, in the summer and again late in the winter. But even when they shed their flight feathers they are not believed to be completely flightless.

The loon does not fly very high, but his flight is swift. It has been clocked at fifty to sixty miles an hour. In flight the bird looks hunchbacked as the neck drops downward. The feet trail out beyond the tail, the soles held together to reduce wind resistance. The bird's landing is a superbly smooth performance. He usually reduces altitude by circling several times, then comes down in a seaplane landing, wings held stiffly, sometimes in a V, his feet ready to contact the water. As soon as he touches the surface, he throws up a trail of spray, until his long, smooth glide is completed and he rests on the water.

The loon swims in various positions. At times he may be seen riding high on top of the waves like a cork. Then again he will sink down, his body half submerged as though it were waterlogged. He often swims along with his body on top of the water and his head under water, like a periscope in reverse. He may do this when looking for food in the water, or he may swim along this way for no apparent reason. If he decides to, he can sink like a dead weight. If he is not in a hurry to submerge he sinks slowly

until only his head is above water, and then that too disappears, with scarcely a ripple to show where he went down.

Like other diving birds, loons can change their weight and reduce their buoyancy. By compressing their thick, waterproof plumage, and forcing out the air, loons can dive to great depths quickly. Fishermen who set their nets deep in Lake Superior have caught loons several hundred feet below the surface. Sometimes a loon's head has been caught in a net.

For a fast dive, the loon uses his wings to propel himself forward and downward. He stays under water for half a minute and sometimes even a minute at a time. Sixty seconds is quite a long period for any air-breathing creature to stay submerged. Records show that a loon can stay under water for two or three minutes at a time, but such instances are rare. He might possibly come up for a little air during that time without actually showing much of himself. It is known, however, that diving birds can store oxygen in their muscles. This helps them to stay under water longer.

The loon has several strange antics. One of his tricks is to roll over on his side while resting on the water. One leg is submerged, the other waving to and fro. His snowy breast, gleaming white, is visible for a long distance. Another peculiar habit is to stand up straight in the water, dramatically beating his wings.

The loon is best known for his calling. Often on a still evening his phantom voice rings out clear and pure in the land of forest-rimmed lakes, startling in its clarity. At times it has the quality of the Alpine yodel. A thin falsetto is another phase of the loon's call. Occasionally the loon indulges in bird talk with others in a flock. Frequently his call becomes wild and weird, like a timber wolf howling. The loon's familiar quavering laughter is truly the voice of the wilderness.

Just as one of Minnesota's stateliest forest trees, the Norway pine (*Pinus resinosa*), is the state's official tree; and one of its most beautiful flowers, the lovely pink and white lady's-slipper (*Cypripedium regina*), is the official state flower; so is the loon (Common loon, *Gavia immer*), distinctive among the birds of Minnesota, a fitting symbol of this state of lakes and waterways.

Other Materials about the Loon

The Common Loon in Minnesota by Sigurd T. Olson and William H. Marshall. 77 pages, paper bound. This illustrated booklet, published by the University of Minnesota, is an authentic, well-rounded discussion of the loon. It includes a description of the appearance, habits, calls, habitat, migration, and every other important aspect of the bird. It also gives a useful summary of information on the loon and a list of all the sources consulted by the authors. The study is illustrated with twenty photographs and drawings.

To obtain this booklet, write to: Museum of Natural History, University of Minnesota, Minneapolis 14, Minnesota. Enclose 75 cents in coin or check, plus a four-cent stamp for postage.

The Common Loon—Minnesota State Bird. This four-page folder has one colored illustration, two black and white drawings, and a brief discussion of the loon. The price is 25 cents. It is prepared by the Minnesota Ornithologists' Union, and may be obtained by writing to the address given in the paragraph above.

Volume I of *The Birds of Minnesota* by Thomas S. Roberts, found in many libraries, has a six-page discussion of the loon, beginning on page 138. The description includes several illustrations.

The Loon's Necklace. 16 mm, color-sound film. Showing time ten minutes. A charming presentation of the Indian legend telling how the loon got its white neckband. The story is narrated by means of Indian ceremonial masks from the Canadian national museum.

The film may be rented for \$3.00, plus 16 cents for postage and insurance. To obtain it, write to: Audio-Visual Extension Service, 115 T. S. M. a, University of Minnesota, Minneapolis 14, Minn.

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